Feebates: Complement or replacement for standards?

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Reducing Greenhouse Gas Emissions from Passenger Vehicles "What's Next?"

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What is a "feebate"?

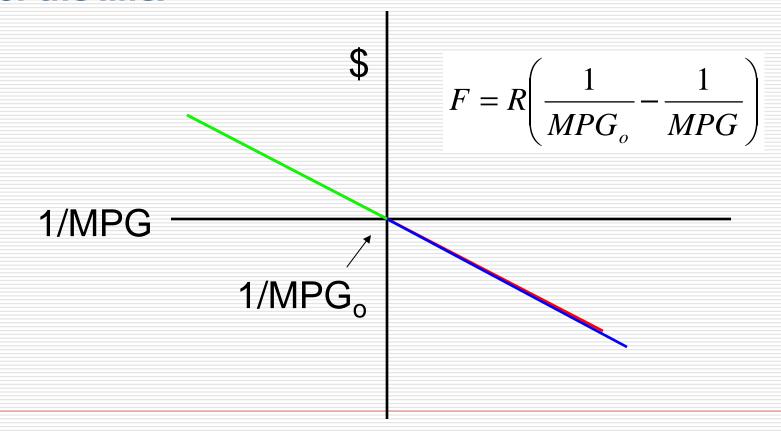
- A fiscal policy combining
 - A FEE on inefficient vehicles
 - A reBATE on efficient vehicles.
- A "pivot point" defines who pays and who receives. (distribution)
- A "rate" determines the marginal costs and benefits. Essentially an extra marginal cost of fuel or emissions capitalized at vehicle purchase.

Feebates can take many forms.

The simplest feebate is based on gallons per mile,

GPM = 1/MPG. (25 MPG = 0.04 GPM)

The pivot point is the origin, the rate, R, is the slope of the line.



Our format will be 5 minutes presentation, 10 minutes discussion.

- How do feebates work?: John German
- Alternative forms: Spencer Quong
- □ Complement or alternative to standards?: Walter McManus
- Impacts on consumers, dealers and manufacturers: Brian Maas
- Political dynamics: All
- What do we still need to know?: All

THANK YOU.

Encouraging Technology Spread Across the Fleet

Direct and Indirect Influences on Transportation Sector GHG Emissions

Factor/Entity		Vehicle	Vehicle Efficiency			Carbon content
Strategy	Primarily affects	Miles Traveled	Leap-Forward Technology	Technology spread	Smaller vehicles	Alternative fuels
Fuel price (taxes)	Consumers	+			+	+ (if fuel price difference)
Land Use & Infrastructure	Consumers	+				
Technology mandates/ incentives	Manuf.		+			+ (w/ enough dollars)
CAFE or Feebates	Manuf.			+	(possible but small impact)	+

CAFE and Feebates fill the same gap between societal and consumer value of fuel savings

Fix FE or Cost?

- ☐ CAFE fixes the **amount** of FE improvement, but
 - If standard is set too high, incremental costs skyrocket and market may not accept technology or vehicles
 - If level is too low, cost-effective technology is not used
 - No incentive to do more than the absolute minimum
 - Is not responsive to market or technology changes
- Manufacturer revenue-neutral incentive programs fix the cost of fuel economy improvements
 - Economically sound
 - **■** Continuous incentive to improve FE
 - Automatically adjusts to technology changes
 - Fuel economy, however, is not fixed



CAFE provides certainty of fuel economy increases Feebates provide certainty of cost-effectiveness

France's feebate step function is approximately equivalent to \$1,500 per 0.01 gallons per mile, a significant rate.

